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09/992,686	11/16/2001	Gil Gavriel Dudkiewicz	051448.0203	1013

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David A. Blumenthal  
Foley & Lardner  
Suite 3500  
2029 Century Park East  
Los Angeles, CA 90067-3021

EXAMINER

SALCE, JASON P

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/992,686

Applicant(s)

DUDKIEWICZ ET AL.

Examiner

Jason P Salce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 15-22, 29-31, 34-46 and 49-58 is/are rejected.
- 7) ☐ Claim(s) 9-14, 23-28, 32, 33, 47 and 48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 11/16/01 has been received. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Objections***

2. Claims 3, 17, 29-30 and 44-45 are objected to because of the following informalities:

Referring to claims 3 and 17, "wherein a keyword match is a match the at least" should read "wherein a keyword match is a match of the at least". Appropriate correction is required.

Referring to claims 29 and 44, "ranking the programming events in accordance viewing preferences" should read, "ranking the programming events in accordance with viewing preferences".

Referring to claims 30 and 45, "in said programming event schedule" should read "in said programming event alert schedule".

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8, 15-22, 29, 34-35, 37-44, 49-50 and 52-58 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Herz et al. (U.S. Patent No. 6,088,722).

Referring to claim 1, Herz discloses receiving metadata describing programming events (see Column 25, Lines 5-6 for receiving a content profile at the viewers set-top box and Column 10, Lines 21-25 for a description of how the content profile contains metadata (data about data)). Herz also discloses the metadata for a programming event a goodness of fit score associated with categories of a classification hierarchy (see the "sample content profiles" in Column 21, Lines 40-67 and Column 22, Lines 1-8 for a goodness fit scores associated with a classification hierarchy (romance, high tech and violence)). Not that for each program, (programming event) a score is given to classify the programs best fit into a classification hierarchy (subject matter of program, i.e. romance). Herz also discloses that the metadata for a programming event contains descriptive data (see again "sample content profiles", which discloses the program name, which can be considered "descriptive data" as claimed).

Herz also discloses ranking the programming events in accordance with viewing preferences expressed in one viewer profile (see Column 26, Lines 5-10 for comparing the content profile to the customer profile for creating an agreement matrix and Column 26, Lines 10-17 for using a calculated agreement matrix for ranking the programming events). Herz also discloses that a viewer profile (see "Mary" in an example customer profile disclosed at Column 21, Lines 25-35) contains preference scores associated with categories of the classification hierarchy and one keyword (see "9.0" for the romance

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category and other examples in the sample customer profile). Note again that “romance”, “high-tech”, and “violence” and the associated preference scores define a classification hierarchy. Herz also discloses that the ranking uses the metadata goodness of fit scores and the viewer profile category preference scores to determine rank based on category matching (see Column 22, Lines 15-25 to show a calculated weight matrix for each category of programs). Herz also discloses that the ranking further uses the metadata descriptive data and a keyword of the viewer profile to determine rank based upon keyword matching (see Column 22, Lines 26-45 shows the calculation of the agreement matrix based on the program name (descriptive data) of the content profile and the keyword (“romance” for example) of the customer profile, and Column 22, Lines 47-51 discloses that this is accomplished by keyword matching).

Referring to claim 2, Herz discloses that the ranking is performed such that programming events having keyword matches are ranked higher than programming events not having keyword matches, and programming events not having keyword matches are ranking based upon category match scores (see Column 22, Lines 52-57 teaches that in the absence of a particular characteristic (keyword data) that categories are used to determine the agreement matrix (rank) instead of comparing the customer profile and content profile in the manner discussed above).

Referring to claim 3, Herz discloses a category match score for each programming event as a function of the metadata goodness of fit scores and viewer profile preference scores of matched categories of the programming event, wherein a matched category is a category of the classification hierarchy for which there is a

goodness of fit score in the metadata of the programming event and a preference score in the viewer profile (see weight matrix at Column 22, Lines 15-25).

Herz also discloses determining a keyword match score for each programming event having a keyword match, wherein a keyword match is a match of the descriptive data of the programming event metadata and a keyword of the viewer profile (see agreement matrix at Column 22, Lines 26-51).

Referring to claim 4, Herz discloses that a keyword match score is greater than a greatest possible category match score, and wherein said ranking is based upon said keyword match scores and said category match scores (note in Column 22, Lines 15-57 that the category match score is calculated in the weight matrix, and the keyword score is calculated in the agreement matrix, which is always used before a possible category matching scheme is considered in the absence of a keyword calculation, therefore the keyword scheme ranks higher than the category matching scheme).

Referring to claim 5, Herz discloses that programming event metadata further comprises a time and duration of the corresponding programming event (note at Column 25, Lines 45-47 that a schedule of available shows and their characteristics (content profiles) is created and stored in a database, and Column 25, Lines 57-62 the data is transmitted in the VBI of a video broadcast to a viewer). The examiner notes that a schedule in a television broadcast system inherently contains time and duration of a programming event.

Herz also discloses that a programming event-recording schedule is determined in accordance with the keyword match scores and category match scores of the

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programming events and the times and durations of the programming events (see Column 23, Lines 41-44 for determining a program schedule based on the content and customer profiles, which calculates both keyword and category match scores, as described in the above rejections of claims 1-5).

Referring to claim 6, Herz discloses determining a programming event alert schedule in accordance with the keyword match scores and category match scores of the programming events and the times of the programming events (see Column 23, Lines 55-66 for a description of providing an electronic program guide that displays the best fit programs from the calculations of the keyword match scores and category match scores (calculation of the agreement matrix)).

Referring to claim 7, Herz discloses that the alert schedule comprises a predetermined number of programming events within a given time period as specified in a viewer profile (see Column 23, Lines 51-55 for displaying programming event to an EPG and Column 22, Lines 40-45 for a list of predetermined number of programming events). An EPG inherently defines programming events within a given time period (for example only displaying a programming block of channels from 8pm to 10pm).

Referring to claim 8, Herz discloses the first two paragraphs of limitations in the rejection of claim 59. Herz also discloses the additional limitation of a qualified keyword match score. The examiner notes that a qualified keyword as claimed, and a keyword are equivalent, therefore since multiple keyword match scores are disclosed by Herz, then a qualified keyword match score is covered by the disclose of Herz as well.

Referring to claims 15-22, see rejection of claims 1-8, respectively.

Referring to claim 29, Herz discloses receiving metadata describing programming event comprising goodness of fit scores associated with categories of a classification hierarchy and descriptive data (see rejection of claim 1). Herz also discloses ranking the programming events in accordance with preferences expressed in a viewer profile using the metadata (see rejection of claim 1).

Herz also discloses determining a programming event alert schedule in accordance with said ranking (see Column 23, Lines 41-51 for scheduling programs in an EPG according to an agreement matrix).

Herz also discloses providing alerts to a viewer in accordance with said alert schedule (see Column 23, Lines 51-55 for displaying the selected programs to a viewer using an EPG).

Referring to claim 34, Herz inherently discloses determining an amount of time in advance of a programming event to display an alert for the programming event from one viewer profile (see Column 23, Lines 40-46 for determining a schedule of programming events). Therefore, this schedule inherently would have to be determined before it is displayed to a viewer, otherwise the alert could not be displayed.

Herz also discloses displaying an alert for programming events in the programming event schedule in accordance with the amount of time (see displaying an EPG at Column 23, Lines 51-55).

Referring to claim 35, Herz discloses a remote control unit for providing viewer input (Column 47, Lines 18-24).



Referring to claim 37, Herz discloses determining a programming event alert schedule comprising selecting not more than a predetermined number of highest ranking programming events to occupy a given time period in said schedule (see clustering algorithm in Column 40 and 41 for calculating an agreement matrix and Column 23, Lines 40-65 for providing an alert schedule based on the agreement matrix calculated).

Referring to claim 38, Herz discloses that the predetermined number and said given period of time are determined from a viewer profile (see Column 23, Lines 41-44 for a teaching of how the customer profile is used to determine the predetermined number of programming events displayed in the EPG and the period of time in the schedule).

Referring to claim 39, see rejection of claim 1.

Referring to claim 40, see rejection of claim 3.

Referring to claims 41 and 42, see rejection of claim 64.

Referring to claim 43, Herz discloses a display at Column 23, Lines 51-55.

Referring to claim 44, see rejection of claim 29.

Referring to claims 49-50, see rejection of claim 34-35, respectively.

Referring to claims 52-53, see rejection of claims 37-38, respectively.

Referring to claims 54-58, see rejection of claims 39-43, respectively.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 30-31, 36, 45-46 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. in view of Alexander et al. (U.S. Patent No. 6,177,931).

Referring to claim 30, Herz discloses providing alerts to a viewer (see rejection of claim 29), but fails to teach displaying a banner on a video screen describing a programming event in said programming event schedule. Alexander teaches a banner at the top of the program schedule grid in Figure 3 (see "Remember Wenn" program description), which describes the programming event highlighted in the event schedule. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the EPG, as taught by Herz, using the additional information of a programming event in a banner, as taught by Alexander, for the purpose of providing improved viewer interaction capabilities with the EPG (see Column 2, Line 5 of Alexander).

Claim 31 corresponds to claim 30, with the additional limitation of a color of the banner indicates a viewer profile most closely matched by the corresponding programming event. Alexander teaches this limitation at Column 16, Line 67 and Column 17, Lines 1-2 by color-coding the EPG sections according to theme. The examiner notes that theme is a category described in a viewer profile of Herz.

Referring to claim 45-46, see rejection of claims 30-31.

Referring to claim 36, Herz discloses displaying a programming event alert schedule and displaying the alert schedule in accordance with a viewer input, but fails to

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teach removing an alert from the alert schedule in response to the viewer input.

Alexander teaches a remote control for displaying an alert schedule in Figure 2 and a remove option in Figure 6. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the program guide, as taught by Herz, to include a programming event removal option, as taught by Alexander, for the purpose of providing improved viewer interaction capabilities with the EPG (Column 2, Line 5 of Alexander).

Referring to claim 51, see rejection of claim 36.

#### ***Allowable Subject Matter***

5. Claims 9-14, 23-28, 32-33 and 47-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claim 9, the prior art of record fails to teach determining a keyword, category and qualified keyword matching score to determine programs to display in an EPG. Note that unlike claim 8, claim 9 specifically defines the hierarchy of the keyword, category and qualified keyword determination results, therefore teaches that a keyword and qualified keyword differs in value. Claim 8 does not teach a difference between a keyword and a qualified keyword match score.

Referring to claim 32, the prior art of record fails to teach a banner that displays a programming event including a highest scored matched keyword and category.

#### ***Conclusion***

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Knee et al. (Patent Application Publication US 2002/0095676) discloses determining user values for demographic categories.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5359 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

May 19, 2003

  
**VIVEK SRIVASTAVA**  
**PATENT EXAMINER**